

ABSTRACT

[Abstract]

[Problems] It is an object of the invention to provide a tool for precision finishing and grooving of quenched steel by thinning a coating film of a CBN sintered compact tool.

[Means to Solve the Problem] The invention provides a surface-coated high hardness material for tool comprising a cubic boron nitride sintered compact (CBN sintered compact, hereinafter) as a substrate and at least one coating film layer formed on the surface of the substrate wherein said coating film layer has thickness of 0.1 μm or more and less than 1 μm and comprises, as main component, a compound having at least one kind of element selected from C, N and O, and Ti and Al. If this material is used as a grooving tool, excellent performance is exhibited. Examples of the coating film are an intermediate layer, a wear-resistant film, a surface layer and the like.

[Selected Drawings] Figure 3